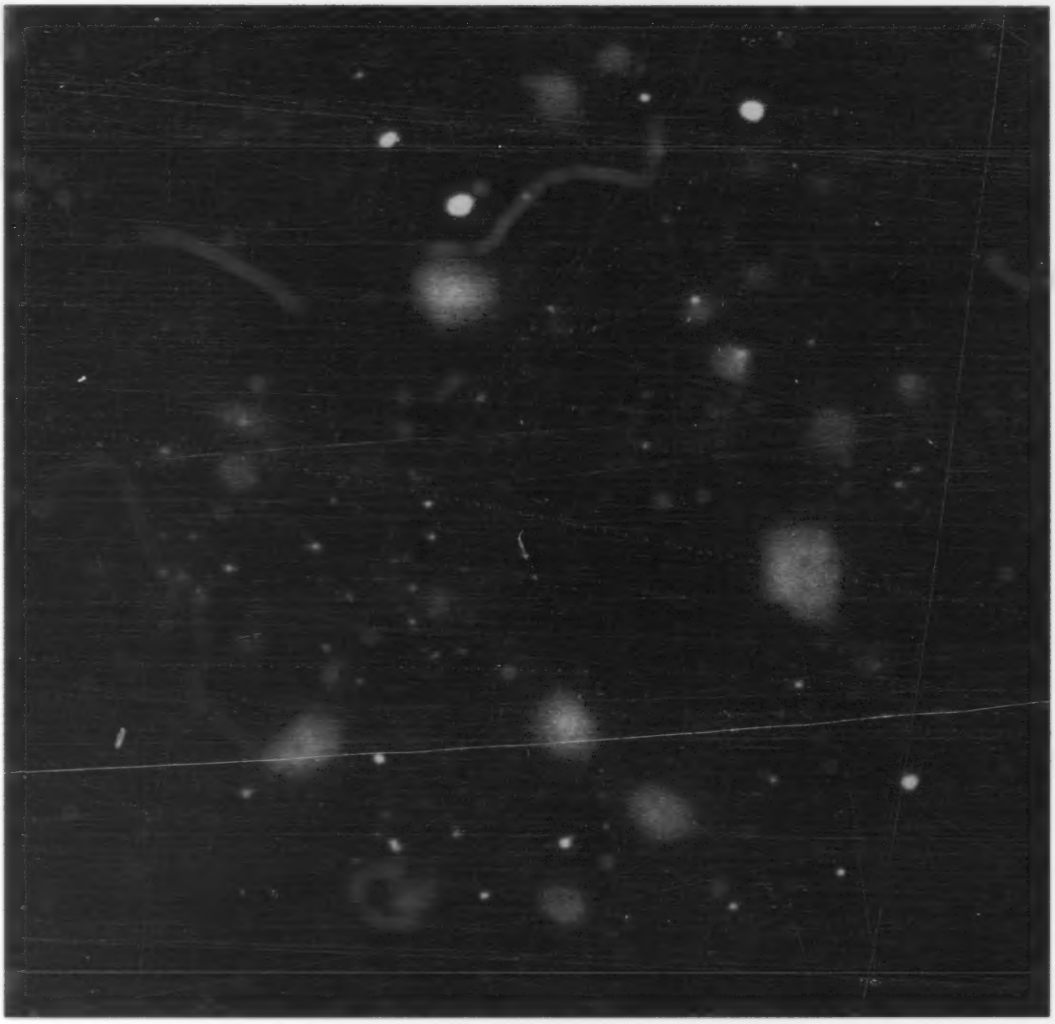
Manitoba
Health
Research
Council



ANNUAL REPORT 2003-2004

104-07777/

MISSION STATEMENT

To promote the growth and co-ordination of the health research enterprise in Manitoba

Cover photo —TLS immunofluorescence localized to discrete nuclear foci. This photo was graciously provided by Dr. Geoff Hicks from CancerCare Manitoba

For more information contact:

MANITOBA HEALTH RESEARCH COUNCIL
P127-770 Bannatyne Avenue
Winnipeg, Manitoba, Canada R3E 0W3

Telephone (204) 775-1096 Fax (204) 786-5401

E-mail MHRC@cc.umanitoba.ca

Homepage www.umanitoba.ca/academic_support/MHRC/

TABLE OF CONTENTS

Members of MHRC Council 1
Report of the Chairperson 2
MHRC appoints new Executive Director 5
A New Member Appointed to Council 6
Lyonel G. Israels – In Appreciation 7
Researchers funded in 2003-2004 Competition 8

GRANTS & AWARDS PROGRAMS
Purpose & Overview of Programs 19

GRANTS
New Establishment Grants 22
Establishment Grant Renewals 23
New Operating Grants 24
Operating Grant Renewals 25
Regional Partnership Grants 25
Regional Partnership Salary Awards 26
Bridge Funding Award 26

PERSONNEL AWARDS
New Postdoctoral Fellowship Awards 28
Postdoctoral Fellowship Renewal 28
Travel Award for excellence in Postdoctoral Research 29
New Graduate Studentship Awards 30
Graduate Studentship Renewals 32
Dissertation Award 34

REVIEW COMMITTEES
Operating & Establishment Scientific Review Committee 35
Personnel Scientific Review Committee 36
Social/Population Health Scientific Review Committee 37

2003-2004 FINANCIAL REPORT
2003-2004 Fiscal Overview 38
Management's Report 39
Auditor's Report 40
Financial Statements 41

MEMBERS OF THE MANITOBA HEALTH RESEARCH COUNCIL

Dr. Jane Evans ♦, Chairperson
Department of Biochemistry
& Medical Genetics
University of Manitoba

Mr. Dwight Barna
Assistant Deputy Minister
Manitoba Health

Dr. Gary Beazley, Professor Emeritus
Department of Family Medicine
University of Manitoba

Dr. Peter Cattini •
Associate Vice-President (Research)
University of Manitoba
(From March 1, 2004)

Dr. Patrick C. Choy ♦•, Vice-Chair
Associate Dean (Research)
Faculty of Medicine
University of Manitoba

Mr. John Clarkson
Deputy Minister
Department of Energy, Science &
Technology

Dr. Joanne Embree
Department of Medical Microbiology
University of Manitoba

Dr. Norman Fleming ♦
Associate Dean (Research)
Faculty of Dentistry
University of Manitoba

Dr. Andrew Halayko
Department of Internal Medicine
University of Manitoba

Dr. Digvir Jayas •
Associate Vice-President (Research)
University of Manitoba
(to February 29, 2004)

Dr. Colleen Metge ♦
Faculty of Pharmacy
University of Manitoba

Dr. Yvonne Myal
Department of Pathology
University of Manitoba

Dr. Suresh Mysore
Laboratory Director
Victoria General Hospital

♦ Members of the Executive/Finance Committee
• Appointed by the University of Manitoba

COUNCIL SECRETARIAT

Executive Director:

Dr. Bruce E. McDonald
(to December 31, 2003)

Dr. John C. Docherty
(from January 1, 2004)

Administrative Secretary
Ms Elizabeth C. Ford

REPORT OF THE CHAIRPERSON

DR. JANE EVANS

It is a pleasure to report on the activities of the Council during the past year, my second as Chair. Council has now been actively serving the health research community in Manitoba for 21 years. It is fitting that in this, its 21st year, there are positive signs that the Manitoba Health Research Council may now be maturing into an organization that can play a larger role in health research in the province (more on this later).

For now, the grants and awards programs continue to be the cornerstone of MHRC's contribution to health research in the province. Once again the quality of the applications was truly outstanding and, as in recent years, only those applications rated as "excellent" could be funded with many "very good" applications going unfunded. In the years ahead, I hope that we can try to fund more of the very good applications. I would like to express my sincere gratitude to the review committee members for the time and effort that they devoted to the review process, ensuring that the highest standards of quality and integrity were maintained. This process would not be possible without their help. In many ways these committee members, having previously received funding from MHRC are "paying back" to the system. Council truly appreciates the enthusiasm and good nature with which this task is approached. We are also very grateful for the contribution of out-of-province researchers (indeed they come from many parts of the world) in providing expert, external assessment of the quality of the applications to MHRC.

This year saw the final demise of the University – Industry Awards program. The funds available for this program, originally derived from Federal transfers related to the passage of Bill C22 (the Drug Patent Act) and held in the Strategic Health Research Development Fund, had dwindled to an extent where it was not feasible to hold further competitions. The money from the SHRDF was rolled into general program funds, permitting the funding of 2 additional applications ranked at the very top end of the very good category and 8 graduate studentships. The demise of this program leaves a serious void in the MHRC funding program that Council sincerely hopes can be rectified.

Unfortunately, the Province was not able to allocate funds to the Canadian Institutes for Health Research Regional Partnerships Program (CIHR- RPP) in this fiscal year. The pressure of demands on the research funding envelope, and a perceived low priority for

the CIHR-RPP did not allow for support this year. Council hopes that the important role that the CIHR-RPP plays in allowing new investigators to succeed in national competition is recognized and that the program is given a higher priority in the future with funding reinstated in coming years.

On a more positive note, MHRC has finally taken the first step towards enhancing its role in health research in the Province. This step, the hiring of a full time executive director and enhancement of the administrative support for Council, was made possible by an increase in the provincial funding of MHRC to cover these costs. It is gratifying to note that this first movement towards implementation of an action plan that has been gestating for over 10 years occurred within one year of the formation of the new ministry of Energy, Science and Technology, to which MHRC now reports. Council is excited at the prospect of working with Minister Tim Sale and his staff to further the interests of health research in Manitoba. With the Minister's encouragement, the Council as a whole has had two opportunities to meet with him to exchange thoughts and opinions about health research in Manitoba.

The Government of Manitoba has highlighted biotechnology and related activities as one of the areas of strategic importance to the Province in planning ahead for a strong and well diversified economy. Council strongly believes that MHRC can and will play a leading role in helping to achieve this objective. The strengths of the health research enterprise at the provincial universities, and their associated research institutes and foundations, has been complemented by the location of federal labs including the National Research Council's Institute for Biodiagnostics and the National Microbiology Lab in Winnipeg. Council has started the process of bringing all of these stakeholders together to devise, and implement, a strategic plan that can rationalise provincial funding for health research over the next 5 years, while maximising the strengths of each of these partners.

Council is very pleased to welcome Dr. John Docherty as the first full time executive director of MHRC. Dr. Docherty brings to the position a broad and varied background, having previously held positions in university, a federal laboratory and a start-up medical device company. Council feels that Dr. Docherty, through his direct experience in both basic and clinical research in addition to his experience with technology commercialization, brings valuable insights to the position and looks forward to working with him as MHRC assumes a leadership role in promoting and helping to direct health research in the province.

There has been some concern that many federal initiatives on health research have involved partnering with, and funding from, the provinces, but there has been very little discussion with the provinces when devising these initiatives. To address these issues, health research funding agencies from all of the provinces (with the exception of New Brunswick) have formed a loose coalition and have met four times over the past 18 months. At the most recent of these meetings, attended by Dr. John Docherty, in Vancouver in March 2004, this interaction was put on a more formal basis. The Association of Provincial Health Research Funding Agencies was formed with the initial co-chairs being Dr. Aubrey Tingle, CEO of the Michael Smith Foundation in BC, and Ms Krista Connell, Executive Director of the Nova Scotia Health Research Foundation. The initial objective in forming this Association was to allow the provinces to speak with a

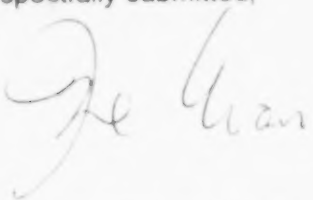
united voice, especially on issues regarding federal – provincial interactions related to health research. However, the Association is now expanding into other areas of common interest including determining best practices in issues such as evaluation of programs and compiling inventories of capabilities.

Council was pleased to welcome a new member during the past year. Dr. Peter Cattini was appointed by the University of Manitoba, replacing Dr. Digvir Jayas. I would like to congratulate Dr. Cattini on his appointment as Associate Vice President (Research) at the University of Manitoba and subsequent appointment to Council. The appointment of a second Associate Vice President of Research at the University underscores the importance that the University places on research. Furthermore, the appointment of Dr. Cattini, from the Faculty of Medicine, to this position stresses the important role that health research plays in the research enterprise as a whole. I would like to thank Dr. Jayas for his outstanding contribution during his tenure on Council.

I would like to conclude by thanking Dr. Bruce McDonald for his stellar service to Council during the 6 years that he served as Executive Director. Bruce provided Council with sound judgment, excellent administrative skills and great enthusiasm. I am sure that we will continue to benefit from his expertise and wisdom for some time to come. Thanks are also due to Elizabeth Ford for her great administrative support to Council and excellent accounting skills. It is anticipated that Liz will take a greater role in administration of the grants and awards program in the months to come.

Finally, I would like to express my thanks to the individual members of Council for their support and enthusiasm. We have an excellent group of people: researchers, clinicians, practitioners. They are diversified by their expertise and interests; they are united by their commitment to the enhancement of the health research endeavor in Manitoba and their willingness to help in its promotion.

Respectfully submitted,



Jane A. Evans PhD, FCCMG
Chairperson

MHRC APPOINTS A NEW EXECUTIVE DIRECTOR

The Manitoba Health Research Council is pleased to announce that *Dr. John Docherty* has been appointed the Executive Director of the Manitoba Health Research Council effective January 5, 2004. Dr. Docherty is the third executive director in the history of the MHRC, following in the footsteps of Dr. Frits Stevens (1982 – 1997) and Dr. Bruce McDonald (1997 – 2004).

The position of Executive Director, which had been a part-time appointment, has been expanded to a full-time position in keeping with the greater role MHRC is expected to play in the support and promotion of basic, clinical and applied health research in Manitoba. The Council believes that Dr. Docherty's experience in a wide range of research related activities will be of considerable benefit to the health research community in Manitoba and looks forward to working with him on new initiatives.

A native of Edinburgh, Scotland, Dr. Docherty obtained a BSc (Hons) in biological sciences from the University of Edinburgh in 1976 and a PhD in biochemistry from the University of Leeds in 1980. John arrived in Winnipeg in 1980 to undertake postdoctoral studies with Dr. Brent Schacter at the Manitoba Institute of Cell Biology, and has made his home on the Prairies ever since. Following further post doctoral work with Dr. Jon Gerrard, also at the Manitoba Institute of Cell Biology, Dr. Docherty joined the Department of Pharmacology at the University of Saskatchewan. Dr. Docherty returned to Winnipeg and in 1992 he joined the newly opened National Research Council Institute for Biodiagnostics where he developed a research program in cardiovascular pharmacology. In 2000, Dr. Docherty co-founded (along with his PhD student Rick Mangat) Novadaq Technologies Inc., a spin-off company formed to commercialize a technology developed from Dr. Docherty's research at IBD. Dr. Docherty served as Director of Research at Novadaq until December 2003 being responsible for most aspects of clinical testing and regulatory approval of the technology. Dr. Docherty maintains a keen interest (and an equity holding) in the fortunes of Novadaq Technologies Inc.

John extends his sincere appreciation to Dr. Bruce McDonald for the excellent assistance and advice that he provided in ensuring a smooth transition into the position.

A NEW MEMBER APPOINTED TO COUNCIL

Dr. Peter A. Cattini obtained his B.Sc. (Hons) and Ph.D. degrees in Molecular and Cellular Biology and Biophysics from the University of London King's College in 1979 and 1983, respectively. In 1984, he was awarded a NATO Fellowship to do postdoctoral work with Dr. J.D. Baxter and Dr. N.L. Eberhardt in the Metabolic Research Unit at the University of California, San Francisco. Dr. H.G. Friesen recruited Peter to the University of Manitoba in 1987, where he has gained recognition for his work on molecular regulation of the human growth hormone gene locus as well as the FGF axis in the context of cardioprotection and heart muscle regeneration. Peter has authored and co-authored many scientific publications, as well as peer-reviewed for journals and funding agencies both internationally and nationally. He earned both Medical Research Council of Canada Scholarship and Scientist awards as well as the Manitoba Medical Service Foundation Basic Science Career Development Research Award. In recognition for his research, Peter received the inaugural London Life Award in Medical Research, as well as the Rh Award for Outstanding Contributions to Scholarship and Research in the Health Sciences. Peter considers the training of future scientists to be as equally important as the research itself and is very proud of his trainees. In this regard, he received the Graduate Students' Association Award for Distinction in Mentorship on two separate occasions, 1998 and 2003. Peter was promoted to Professor in 1997, has served as Head of the Division of Molecular Endocrinology and Director of the Gene Technology Group. He was also Head of the Department of Physiology from 2002 to 2004. Dr. Cattini is the current Canadian Institutes of Health Research Delegate for the University of Manitoba, and has served as an Associate Vice President (Research) since January 2004. Peter is married, and is the father of two children, Melissa and Alexander.

Lyonel G. Israels: In Appreciation

With the passing on September 12, 2003 of Dr. Lyonel G. Israels, OC, Distinguished Professor of Medicine, University of Manitoba, our teaching, medical, scientific and lay communities mourned the loss of a shining light. Of the many great achievements throughout his long and distinguished career, arguably the two of which he was proudest were the Manitoba Institute of Cell Biology, which he established in 1969, and the Manitoba Health Research Council, established in 1980 as a result of his persistence and vision.

The MHRC owes its existence to Dr. Israels, who recognized early on that many deserving research projects continually fall victim to the limited amount of funding available from federal granting agencies such as the National Cancer Institute of Canada and the Medical Research Council (now known as the CIHR). Through his wisdom and advocacy, Dr Israels was able to convince the Manitoba government of the necessity to provide additional monies to worthy Manitoba researchers, thereby increasing the chance that they would stay in the province and establish themselves here.

Lyonel could be best described as a perpetual student. He loved knowledge, science in particular and, through his superb ability as a teacher and clinician, stimulated countless students and fellows to pursue their own academic research careers. His legacy will long endure for those who continue to read his many scholarly works, including over one hundred and thirty journal articles, and his widely-praised book "Mechanisms in Hematology", co-edited with Esther, his wife and colleague of over fifty years.

Lyonel received many awards and honors over the years, including Professor of the Year (1970), the St. Boniface Hospital International Humanitarian Award (1983), Member of the Order of Canada (1995), establishment of the Lyonel G. Israels Chair in Hematology at Ben Gurion University (1996), the naming of the Lyonel G. Israels Laboratories at the Manitoba Institute of Cell Biology (2003) and, just before his death, the Chancellor's Award of the University of Manitoba (2003).

The great Ralph Waldo Emerson wrote, "Nothing great was ever achieved without enthusiasm." He must have been thinking of Lyonel, whose great achievements always stemmed from his untiring enthusiasm, and whose passionate pursuit of excellence is unlikely to be equalled, let alone surpassed, in our lifetime.

Lorne J. Brandes, MD
August 19, 2004

Dr. Spencer Gibson received his Ph.D. from the University of Toronto, followed by postdoctoral fellowships at the M.D. Anderson Cancer Center in Houston, Texas and at the National Jewish Medical and Research Center in Denver, Colorado. He is currently an Associate Professor in the Department of Biochemistry and Medical Genetics at the University of Manitoba with his laboratories located at the Manitoba Institute of Cell Biology.

Dr. Gibson's research interest is in discovering the regulation of the balance occurring in cells between surviving and committing suicide (apoptosis). When conditions are correct for cells to grow or perform their function, they will survive. If cells are damaged, in an inappropriate environment, or could cause damage to other cells, they undergo apoptosis. If this balance is upset so that cells destined to undergo apoptosis survive, diseases such as cancer occur. A contributing factor to controlling this balance in cells is a protein called MEKK1. MEKK1 promotes apoptosis by being cleaved into a small fragment that causes changes in mitochondrial function within cells. In contrast, the uncleaved full length protein is activated by growth factors that play a role in cell survival. Dr. Gibson's hypothesis is that MEKK1 is a cellular sensor that, in the appropriate environment, will dictate whether a cell survives or undergoes apoptosis. With the support of the Manitoba Health Research Council, Dr. Gibson will continue to investigate the regulation of MEKK1 in regulating both cell survival and apoptosis. This will have implications in manipulating the survival or apoptotic signaling in cells to control various diseases such as cancer.

Dr. Gordon Glazner obtained his BS degree at the University of Southern Colorado, followed by a PhD at Colorado State University. He then went on to post doctoral fellowships at the National Institutes of Health in Bethesda Maryland and at the University of Houston. Dr. Glazner is an Assistant Professor in the Department of Pharmacology and Therapeutics with labs located at the Division of Neurogenerative Diseases at St Boniface Research Centre.

The ultimate effect of neurodegenerative diseases such as Alzheimer's disease (AD) and stroke, is degeneration of neurons in the brain. This in turn leads to the loss of memory, motor control, and in many cases death. Recent research has shown that when a neuron is exposed to stress, it may activate systems which are protective, or it may activate systems which cause the neuron to die in a form of cellular suicide called apoptosis. In very broad terms, our laboratory is studying the way stresses cause induction of these protective or destructive pathways in neurons, in order to find treatments which shift the decision of the cell under stress away from apoptosis, and towards greater self-protection. Among the first events observed in neurons under stress is an increase in calcium levels in the cytoplasm, and an increase in oxygen radicals in the powerhouse of the cell, the mitochondria. At lower levels this phenomenon activates pathways which lead to activation of a transcription factor termed NF-kB. NF-kB then rapidly moves to the nucleus and directs the cell to produce a wide range of protective proteins, including those which aid in reducing calcium levels and clearing out oxidative stress. At greater levels of calcium and oxidative stress, the cell activates enzymes called caspases, which degrade other proteins. These caspases are the first action in the pathways that lead to apoptosis. We recently published a manuscript showing that release of intracellular calcium is the primary cause of both NF-kB activation and caspase stimulation. Thus, both the protective and destructive pathways have a common biochemical stimulus. In research funded by MHRC, we have discovered that NF-kB can directly inhibit caspase activation and apoptosis by blocking transcription of a key pro-apoptotic factor, termed CHOP. We have also discovered that disruption of this NF-kB/CHOP inhibition is central to an inherited form of AD, a discovery we feel is a major breakthrough in understanding early-onset AD. In terms of treatment of human disease, we have shown that we can inhibit CHOP and apoptosis by blocking internal calcium release using a compound which we are currently testing as a potential pharmaceutical agent, while at the same time activating NF-kB directly using a form of direct manipulation of transcription termed RNA inhibition. This combined treatment appears to be extremely effective in protecting neurons from the effects of stresses associated with stroke and AD, and is currently being examined by the United States Food and Drug Administration as a potential treatment for neurodegenerative disorders.

Dr. Joannie Halas received her Bachelor of Physical Education from the University of Manitoba, her Teachers Certificate from the same institution, a M.Sc. in Kinanthropology from the University of Ottawa and her Ph.D. from the University of Alberta in Edmonton. Dr. Halas is currently an Associate Professor in the Faculty of Physical Education and Leisure Studies at the University of Manitoba.

Dr. Halas uses a participatory action research approach to work with young people, who are often marginalized from the mainstream of society, to create meaningful and relevant physical activity opportunities through their school's physical education program. One research objective is to support young people as they exercise greater control over their own health and well-being. Examples of on going research studies include a physical activity intervention program for adolescent mothers and a leadership training program for urban Aboriginal youth. Dr. Halas is planning a pedometer intervention study involving middle year school students at two rural schools. The children involved in this study will be those at high risk for type II diabetes.

Dr. Lorna Jakobson received her M.A. and Ph.D. in Clinical Neuropsychology from the University of Western Ontario, where she was supervised by Dr. Mel Goodale. Dr. Jakobson is an Associate Professor in the Department of Psychology, University of Manitoba.

Children born prematurely and at extremely-low-birthweight (ELBW: <1000 gm) are at high risk for experiencing problems with attention, with up to 40% being diagnosed with attention deficit hyperactivity disorder (ADHD) by school-age. It is not known, however, whether the mechanisms responsible for attentional problems in this group are similar to those underlying ADHD in full-term children, or how attentional problems impact on the already compromised academic skills of premature children. The proposed study seeks to address these issues by: (a) examining the impact of periventricular brain injuries (the most common form of brain injury seen in preterm children) on specific attentional processes, including sustained attention, selective attention, divided attention, working memory, and response inhibition; (b) investigating whether parental reports of attentional problems in this population change over the early elementary school years; and (c) examining the relationship between specific attentional probiems and academic functioning. The information obtained from this basic research will allow clinicians to predict which premature children are most at risk for attentional difficulties and identify these children in a timely manner.

Dr. Jiming Kong obtained his M.D. degree from Luzhou Medical College and M.Sc. and Ph.D. degrees from The First Medical University of PLA. Following a year as a Visiting Scholar at Baylor College of Medicine, Dr. Kong held Post Doctoral Fellowships at the University of Massachusetts Medical Centre and the University of Manitoba. Dr. Kong is currently an Assistant Professor in the Department of Anatomy and Cell Science at the University of Manitoba.

Dr. Kong's research focuses on amyotrophic lateral sclerosis (ALS, also known as Lou Gherig's disease). ALS is a neurodegenerative disease in which the loss of nerves controlling muscles leads to a progression of symptoms from muscle weakness through spasticity to paralysis and ultimately to death. The cause of this disease process is largely unknown. Dr. Kong is investigating the molecular regulatory mechanisms by which neurons die and is developing strategies to protect against neuronal cell death in ALS. Specifically, Dr. King will investigate the role of a gene called BNIP3 in motor neuron cell death. With a greater understanding of mechanisms causing motor neuron death may come new and effective therapeutic strategies to treat this devastating disease.

Dr. Thomas Netticadan acquired a Ph.D. in Physiology from the University of Bombay, India and thereafter received postdoctoral training at the Institut de la Santé et de la Recherche, France and the University of Western Ontario, Canada. Subsequently, Dr. Netticadan worked as a Research Associate at the University of Manitoba. Dr. Netticadan is an Assistant Professor in the department of Physiology at the University of Manitoba with laboratories located at the Institute for Cardiovascular Science, St Boniface Research Centre.

Dr. Netticadan's research focuses on examining the mechanisms involved in regulating cardiac contractility-contraction and relaxation, in heart failure. Heart failure is a major cause of death in most parts of the world. It occurs when the heart is overloaded with work so that it cannot perform efficiently and it subsequently fails. Abnormal cardiac contractility is the hallmark of heart failure and it could arise due to various causes including diabetes and hypertension. Dr. Netticadan is studying the function and regulation of the sarcoplasmic reticulum, a major regulator of intracellular calcium required for cardiac contractility. Studies are performed in hearts obtained from animal models of hypertension, diabetes and heart failure as well as in human hearts obtained from end stage heart failure patients undergoing cardiac transplantation. These studies will help in understanding the mechanisms underlying contractile dysfunction and aid in identifying potential therapeutic targets in these pathologies. Future goals include using gene transfer technology to manipulate the expression of target proteins in diseased hearts with the aim of improving cardiac contractility and thereby preventing heart failure.

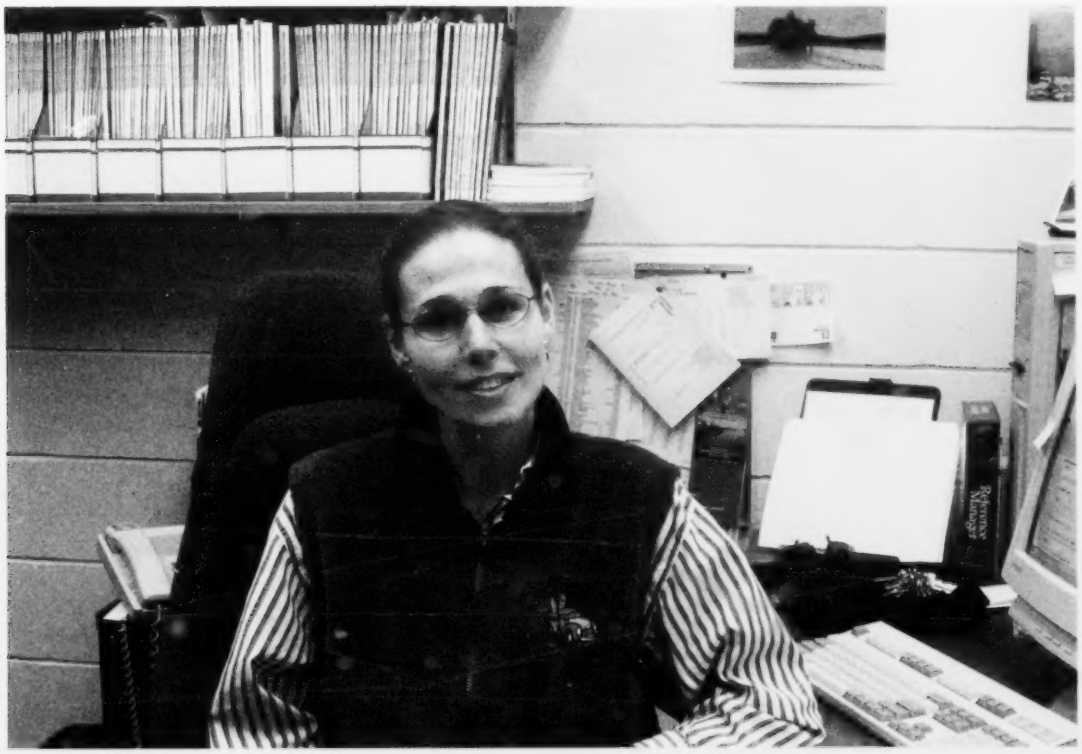
Dr. Karmin O received a Bachelor of Medicine degree from Shanghai University and M.Sc. and Ph.D. degrees from the University of Manitoba. Dr. O undertook post doctoral training at the University of British Columbia and held faculty appointments at the University of British Columbia and the University of Hong Kong prior to being recruited to the University of Manitoba. Dr. O is a newly appointed Associate Professor in the Department of Animal Science and in the Department of Physiology, University of Manitoba. She is also a Principle Investigator in the National Centre for Agri-Food Research in Medicine at the St. Boniface Hospital Research Centre.

The main research interests of Dr. O's laboratory are in the area of risk factor-induced cardiovascular disorders and the beneficial effect of nutraceuticals and functional foods. Specifically, her research focuses on the following areas:

(1) Elucidating the underlying mechanism of risk factor-induced cardiovascular disorders and the protective effect of folate supplementation on inflammation-mediated vascular diseases;

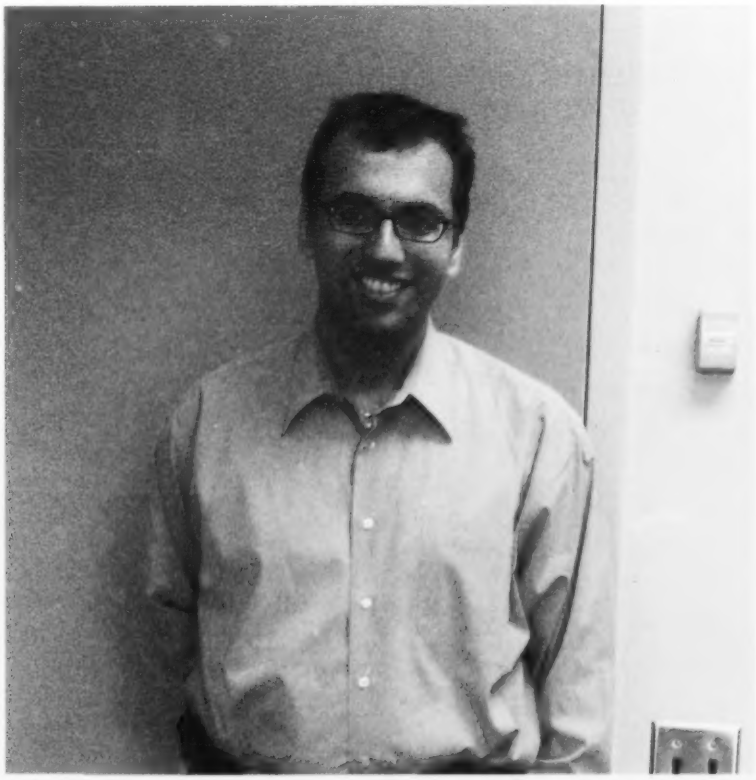
(2) Investigating the biochemical and molecular mechanisms for the protective effect of compounds isolated from herbal medicine on ischemia/reperfusion injury.

Dr. Michelle Porter obtained her Ph.D. in Kinesiology from the University of Western Ontario, and did post doctoral stints at Tufts University in Boston and Lund University in Sweden, before joining the University of Manitoba in 1998. Currently, Dr. Porter is a Professor in the Faculty of Physical Education and Recreation Studies. She is also affiliated with the Centre on Aging, the Health, Leisure and Human Performance Research Institute, as well as the Spinal Cord Research Centre.



In the studies funded by MHRC, Dr. Porter is exploring the use of video and global positioning system (GPS) technology as a potential means of providing improved driver education to seniors. The 55 Alive/Mature Driving Program is a driver re-education program run by the Canada Safety Council and its provincial counterparts. These classroom-based courses are well received, and have been shown to be somewhat effective in increasing knowledge, reducing traffic violations and crashes, but it is felt that an in-vehicle driving component is a needed addition. This study will investigate the added benefits of an in-vehicle feedback session to the usual 55 Alive course. GPS and videotape recording will be used to provide in-vehicle feedback. The overall purpose is to enable seniors to drive safely.

Dr. Jitender Sareen received his M.D. from the University of Manitoba where he also undertook his specialty training in psychiatry culminating in being awarded his FRCPC in 2000. Dr. Sareen is an Assistant Professor in the Department of Psychiatry at the University of Manitoba.



The main focus of Dr. Sareen's research is to study various aspects of how individuals who are suffering with emotional symptoms enter into treatment, choose treatments and stop treatments. Much of this will be achieved through examination of data obtained in provincial and national health surveys. Specific studies include an analysis of the relationship between childhood maltreatment and mental health services utilization. A second area of research will examine the impact of parental bonding and attachment in mental health service utilization. This study will address the question whether the relationship with parents significantly affects an individual's perceived need, help seeking or dropping out of care. These studies will help delineate the understanding of why certain individuals suffering with emotional symptoms do not seek care or drop out of treatment prior to completion. A third area of research will investigate the relationship between diagnosis and perceived need. This arises from the observation that about 70% of individuals who meet the criteria for a mental disorder do not perceive a need or seek help. The question remains, how many of these people go on to recover and not need care compared to those who develop a poorer outcome and need care.

The overall goal is to provide clues in developing effective strategies to improve the care of those who perceive a need for help or seek it.

Dr. Roberta Woodgate received an Interdisciplinary Ph.D. in Nursing/Psychology/Sociology from the University of Manitoba, where she is currently an Assistant Professor in the Faculty of Nursing.

Dr. Woodgate's research program is directed at the study of children's health and illness experiences. She strives to give a 'voice" to children (including adolescents) and their families in order to better understand their perspectives of the worlds in which health and illness care is provided. Presently she is undertaking a 5 year research project that involves the development and validation of a symptom self-assessment tool for children with cancer. The goals of this project are to produce a creative approach (assessment through video game format) to assess symptoms and evaluate the effectiveness of interventions in children with cancer. Undertaking this project will lead to: 1) new interpretations of measuring and modeling children's cancer symptoms; 2) new knowledge of the prevalence and characteristics of children's cancer symptoms and 3) the development of a meaningful, comprehensive and user-friendly computer video game designed to help children assess their symptoms

Dr. Woodgate is also planning a multi-site national study that focuses on how families transition from diagnosis through the bereavement stage of childhood cancer. As the Principal Investigator and in collaboration with researchers at the Mayo Clinic, Rochester, MN, Dr. Woodgate is also in the process of developing an international research project that focuses on health professionals' perspectives of the transition process in childhood cancer. Another area of Dr. Woodgate's research program is focused on studying the perspectives of families of children with cancer about children's participation in clinical trials, parents' informed consent and children's assent.

Dr. Shetuan Zhang received a Ph.D. in Physiology from Tokyo Medical and Dental University, Japan. He received postdoctoral training at the University of Wisconsin-Madison and the University of British Columbia. In July 2003 Dr. Shetuan Zhang was appointed an Assistant Professor in the Department of Physiology at the University of Manitoba and Principal Investigator at The Institute of Cardiovascular Sciences, St. Boniface General Hospital Research Centre.

Dr. Shetuan Zhang's research focuses on specific cell membrane proteins-ion channels, which control the movement of specific ions into heart cells and so determine cardiac rhythm. Dysfunction of these proteins causes arrhythmias, a leading cause of death in heart diseases. Dr. Zhang investigates the fundamental gating properties and regulation of potassium channels. The aim of his research is to elucidate the molecular mechanisms underlying normal and abnormal rhythmogenesis and to develop new anti-arrhythmic therapies. Dr. Zhang uses electrophysiology (patch clamp), molecular biology and gene transfer techniques for his research. The establishment grant from MHRC will enable Dr. Shetuan Zhang to establish a molecular biology laboratory with cell culture facilities to undertake the mutagenesis and gene expression of potassium channels in HEK 293 cells and primary cultures of cardiac myocytes. Together with the patch clamp setups, this infrastructure will enable Dr. Zhang to focus on ion channel studies and greatly add to the capabilities for molecular electrophysiology at the University of Manitoba and St. Boniface General Hospital Research Centre.

PURPOSE AND OVERVIEW OF PROGRAMS

1. PURPOSE

Established by an Act of the Legislature June 30, 1982 to promote and assist basic, clinical and applied research in the health sciences in Manitoba and advise the Minister on health research matters referred to Council.

2. FUNDING

Core Programs: These programs have been funded by grants from the Government of Manitoba. Funding for 2003/04 was $1,952,600 from the Department of Energy, Science and Technology budget.

Partnership Programs: The program provides partnership awards (matching funds) to individuals who have been awarded Canadian Institutes of Health Research Regional Partnership Program (CIHR-RPP) operating grants or personnel awards. Funding for this program is made available through the Department of Energy, Science and Technology.

3. CORE PROGRAMS

Establishment Grants: Establishment Grants are provided to recently recruited faculty members who show exceptional promise to focus on establishing their research programs. The awards, for up to $100,000 to be used within a 3-year period, provide support for a variety of purposes, e.g., buy-out of teaching time, salary for research personnel (other than the applicant's salary), purchase of equipment and supplies, etc. Council will only consider applications from individuals who have held an academic appointment in the Province of Manitoba for no more than 4 years.

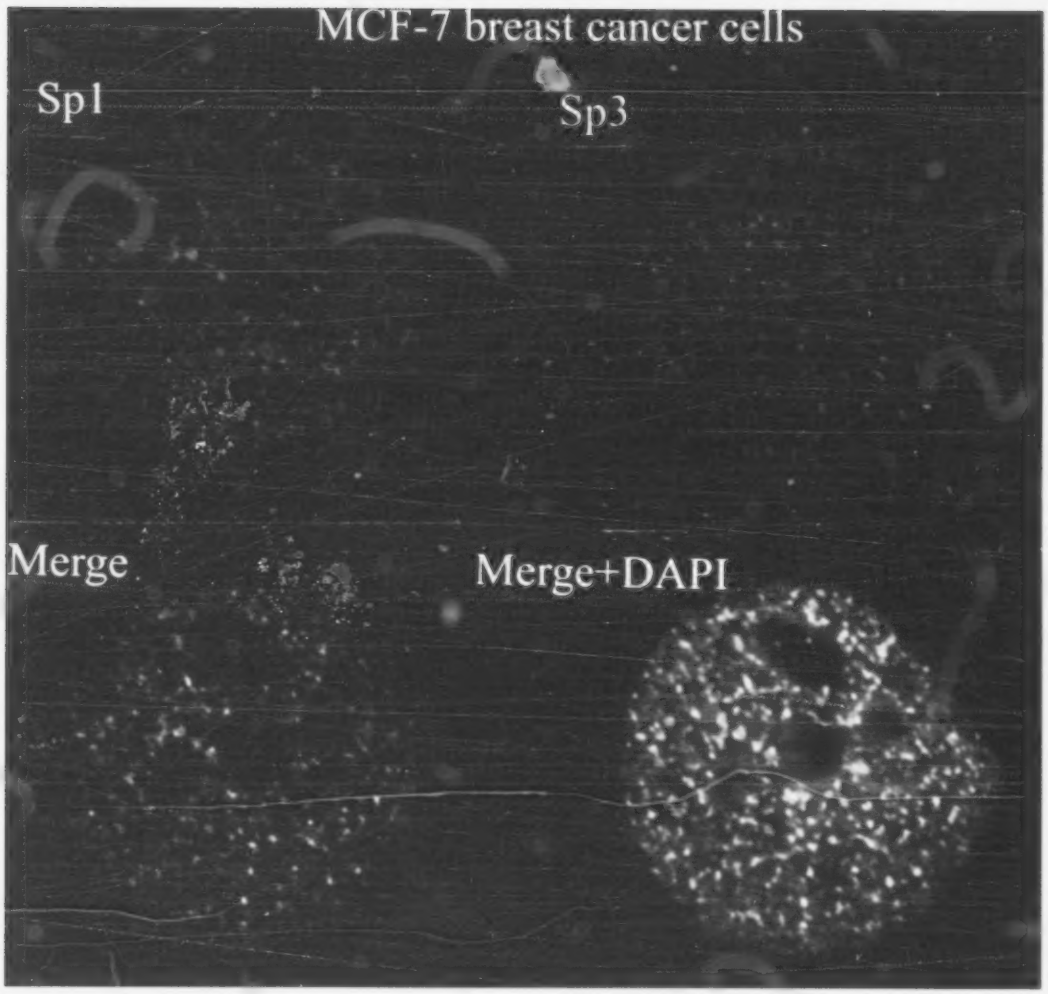
Operating Grants: Investigators who hold an academic appointment at the Assistant Professor (or equivalent) rank or above in the Province for a period of not more than five years are eligible to apply. Operating grants are designed to defray the normal costs of research. Grants are awarded for either one or two years.

Postdoctoral Fellowships: A limited number of fellowships are available to qualified candidates with a doctoral degree whose prior postdoctoral research training normally does not exceed 3 years.

Graduate Studentships: A limited number of studentships are offered to qualified graduate students who are undertaking full-time Master's or Doctoral programs in the Province of Manitoba. However, in disciplines where training at the doctoral level is not available within the Province, Council will consider funding elsewhere if documented evidence is provided confirming the unavailability of Provincial training opportunities, a need in Manitoba for individuals with the training and a firm intent to return to the Province after training.

PhD Dissertation Awards: Dissertation awards are provided to students enrolled in a PhD program in population health or health-related social sciences in Manitoba who have completed all relevant course work and whose dissertation proposal has been approved by their PhD Advisory Committees. The awards, for up to $5,000, are to be used to cover costs incurred in the conduct of the students' dissertation research.

Bridge Funding: Bridge funding awards are once only, one-year awards designed to allow experienced, productive investigators, who have lost funding from a major national agency, to maintain their research operation while they attempt to regain national funding.



This picture shows that transcription factors Sp1 and Sp3 are not colocalized in MCF-7 breast cancer cells (courtesy of Dr. Shihua He and Dr. Jim Davie).

OPERATING & ESTABLISHMENT GRANTS

NEW ESTABLISHMENT GRANTS

Recipient, Department, Institution.	Amount
Glazner, Gordon W., Department of Pharmacology, St. Boniface Hospital Research Centre. **Title:** ER-mediated signal transduction events, including modulation of amyloid beta production, ER stress signals and discovery of novel ER-mediated messengers.	$ 50,000
Halas, Joannie, Faculty of Physical Education & Recreation Studies, University of Manitoba. **Title:** The impact of the quality and cultural relevance of physical education on the health and well-being of children and youth with a particular focus on aboriginal youth.	$ 36,439
Netticadan, Thomas, Institute of Cardiovascular Sciences, St. Boniface Hospital Research Centre. **Title:** The mechanisms underlying contractile dysfunction in heart failure.	$ 46,748
O, Karmin, National Centre for Agri-food Research in Medicine, St. Boniface Hospital Research Centre. **Title:** Neutraceuticals and Functional Foods in Health	$ 50,833
Sareen, Jitender, Department of Psychiatry, University of Manitoba. **Title:** Population based approaches to mental health services utilization and psychiatric comorbidity.	$ 47,461
Woodgate, Roberta L. Faculty of Nursing, University of Manitoba. **Title:** Improving the health and quality of life in children who experience illness and/or disability.	$ 20,958
Zhang, Shetuan, Institute of Cardiovascular Sciences, St. Boniface Hospital Research Cer 're. **Title:** Molecular mechanisms of ion channel function and heart disease.	$ 80,985
TOTAL	**$333,424**

ESTABLISHMENT GRANT RENEWALS

Recipient, Department, Institution.	Amount
Civetta, Alberto, Department of Biology, Faculty of Science, University of Winnipeg. **Title:** Constraints and adaptive nucleotide changes affecting fertility in humans.	$ 22,500
Iwasaki, Yoshi, Faculty of Physical Education & Rec. Studies, University of Manitoba. **Title:** Investigating the contributions of leisure to coping with stress and enhance health above and beyond the effects of general coping not directly associated with leisure.	$29,800
Marshall, Aaron J., Department of Immunology, Faculty of Medicine, University of Manitoba. **Title:** Novel genes regulating B lymphocyte activation and differentiation.	$ 20,000
Mayne, Michael B., St. Boniface Hospital Research Centre, **Title:** Identification and functional characterization of genes involved in neuroinflammation of Multiple Sclerosis and Alzheimer's disease.	$ 33,314
Soussi Gounni, Abdelilah , Department of Immunology, Faculty of Medicine, University of Manitoba. **Title:** Neutrophils contribute to chronic inflammation that characterises the asthmatic state.	$ 37,174
Valdimarsson, Gunnar, Department of Zoology, University of Manitoba **Title:** The role of gap junctions in normal embryonic development and in the etiology of disease.	$26,100
Wigle, Jeffrey T., Division of Stroke & Vascular Disease, St. Boniface Hospital Research Centre. **Title:** How homeobox transcription factors regulate the growth and differentiation of the blood and lymphatic vasculature system during embryonic development and disease progression.	$ 35,400
TOTAL	**$204,288**

NEW OPERATING GRANTS

Recipient, Department, Institution.	Amount
Gibson, Spencer, Manitoba Institute of Cell Biology, CancerCare Manitoba. **Title:** MEKK1 is a molecular switch regulating apoptosis and cell survival.	$ 50,000
Jakobson, Lorna S., Department of Psychology, University of Manitoba. **Title:** Understanding attentional difficulties in extremely premature children.	$ 19,873
Kong, Jiming, Department of Anatomy & Cell Science, University of Manitoba. **Title:** Motor neuron death in amyotrophic lateral sclerosis: Role of BNIP3.	$ 55,400
Marshall, Aaron J., Department of Immunology, University of Manitoba. **Title:** Regulation of B lymphocyte migration and activation during the germinal centre response. (Bridge funding)	$ 16,354
Mayne, Michael, Department of Pharmacology & Therapeutics, St. Boniface Hospital Research Centre **Title:** Role of ryanodine receptors in Alzheimer's disease.	$ 50,390
O, Karmin, Agri-food Research in Medicine, St. Boniface Hospital Research Centre. **Title:** Mechanisms of homocysteine-induced nuclear factor kappa-B activation in endothelial cells.	$ 53,500
Porter, Michelle M., Faculty of Physical Education & Recreation Studies, University of Manitoba. **Title:** An evaluation of the 55 Alive Driving Program with an added road test video feedback component.	$ 35,204
Sareen, Jitender, Department of Psychiatry, University of Manitoba. **Title:** Correlates of Mental Health Services Utilization and Distress in a Canadian community survey.	$ 14,738
TOTAL	**$295,459**

OPERATING GRANT RENEWALS

Recipient, Department, Institution.	Amount
Bruce, Sharon G., Department of Community Health Sciences, University of Manitoba. **Title:** Screening for Diabetes and Diabetes complications in Manitoba First Nations Communities	$ 37,600
Dibrov, Pavel, Department of Microbiology, Faculty of Science, University of Manitoba. **Title:** Membrane topology of the specific Na+/H+ antiporter, Vc-NhaD in Vibrio cholerae.	$ 60,050
Martens, Patricia J., Department of Community Health Sciences, University of Manitoba. **Title:** Sagkeeng follow-up study #2: Effect of prenatal interventions on breastfeeding initiation and duration.	$ 22,450
Merz, David C., Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Genetic analysis of cell migrations and axon guidance in C. elegans.	$ 53,580
Soussi Gounni, Abdelilah, Department of Immunology, Faculty of Medicine, University of Manitoba. **Title:** Regulation and signaling of IL-9 receptor (IL-9R) expressed by human neutrophils.	$ 46,600
TOTAL	**$220,280**

REGIONAL PARTNERSHIPS AWARDS—OPERATING GRANTS

Recipient, Department, Institution.	Amount
Feldman, Heinz, Department of Medical Microbiology, Canadian Science Centre for Human and Animal Health. **Title:** Biosynthesis, targeting and function of hantavirus glycoproteins.	$ 74,600

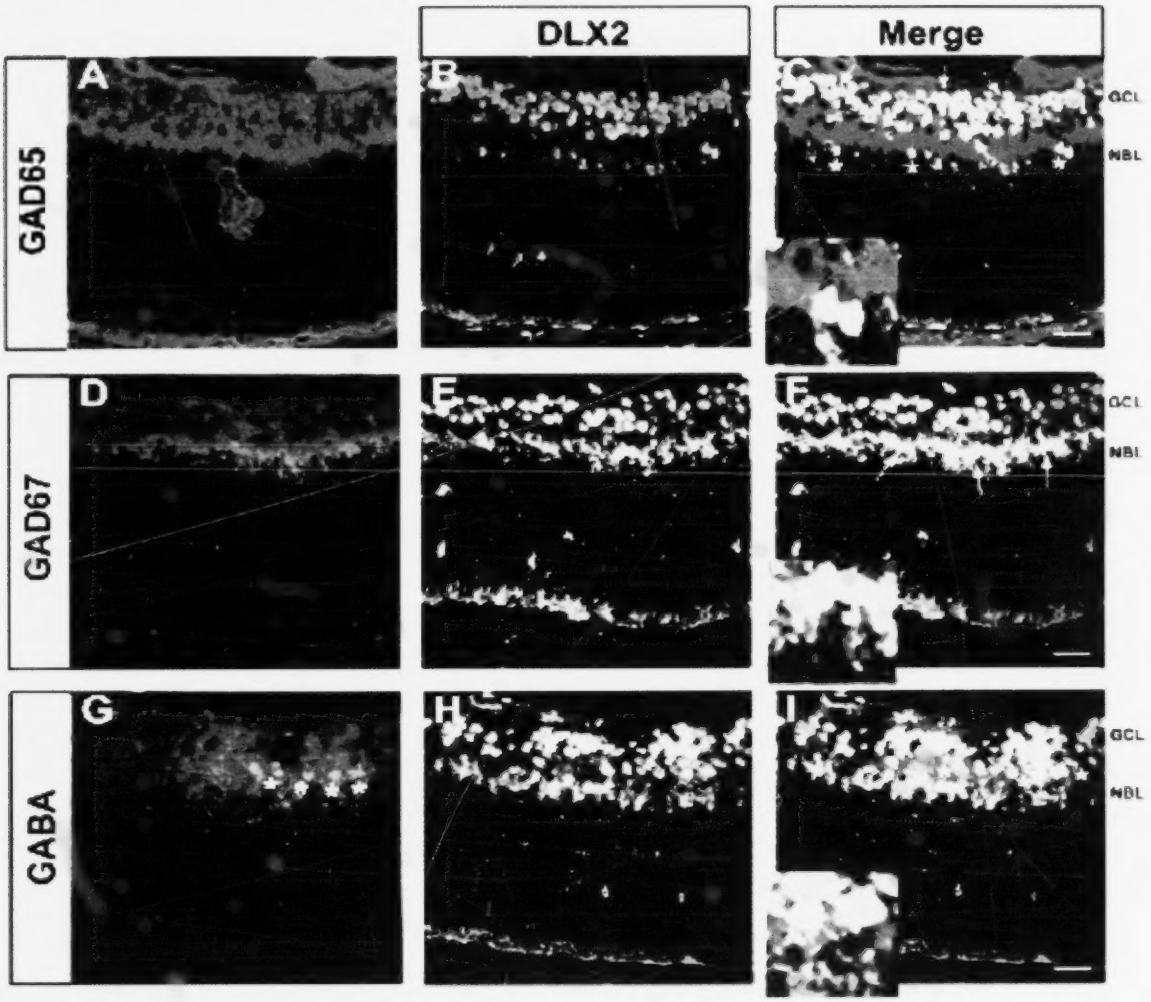
Recipient, Department, Institution.	Amount
Netticadan, Thomas, Department of Physiology, St. Boniface Hospital Research Centre. **Title:** Sarcoplasmic Reticulum function in heart failure.	$ 64,194
Nyomba, Gregoire, Department of Internal Medicine, University of Manitoba. **Title:** Effects of maternal factors of postnatal glucose metabolism in the offspring.	$ 31, 410
Yang, Xi, Department of Immunology, University of Manitoba. **Title:** Host responses in Chlamydia Trachomasis infection.	$119,548
TOTAL	**$289,752**

REGIONAL PARTNERSHIPS AWARDS — SALARY AWARDS

Recipient, Department, Institution.	Amount
Blanchard, Jamie, Department of Medical Microbiology, University of Manitoba. Salary award.	$ 38,500
Hatch, Grant, Department of Pharmacology & Therapeutics, University of Manitoba. Salary award.	$ 38,500
TOTAL	**$ 77,000**

BRIDGE FUNDING AWARD

Recipient, Department, Institution.	Amount
Eaton, Warren, Department of Psychology, University of Manitoba. **Title:** Milestones Study	$ 5,000
TOTAL	**$ 5,000**



The homeobox gene DLX2 is co-expressed with the inhibitory neurotransmitter GABA and GABA's synthetic enzymes GAD65 and GAD67 in the neonatal mouse retina. This photo was graciously provided by Dr. David Eisenstat from CancerCare Manitoba

PERSONNEL AWARDS

NEW POSTDOCTORAL FELLOWSHIP AWARDS

Recipient (Supervisor) Department, Institution.	Amount
Asemu, Girma , (Dr. P.S. Tappia) Institute of Cardiovascular Sciences, St. Boniface Hospital Research Centre. **Title:** Mechanisms of sarcolemmal phospholipase C isozymes-mediated signaling in ischemia-reperfused heart.	$ 35,000
Campbell, Darren Wade, (Drs. Martin P. Paulus & Jeffrey P. Reiss) Department of Psychology, University of Manitoba. **Title:** Habituation and sensitization of fMRI neural responses to emotional faces in patients with social anxiety disorder or schizophrenia.	$ 35,000
Xue, Mengzhou , (Dr. Marc Del Bigio) Department of Pathology, University of Manitoba. **Title:** Hemorrhage in the immature brain-role in potentiation of brain injury.	$ 35,000
Travel	$ 3,000
TOTAL	**$108,000**

FELLOWSHIP RENEWAL AWARD

Recipient (Supervisor) Department, Institution.	Amount
Visen, Neeraj Singh , (Dr. Larry Hryshko) Institute of Cardiovascular Sciences, St. Boniface Hospital Research Centre. **Title:** Evaluating the role of reverse mode Na^+-Ca^{2+} exchange in cardiac physiology and pathophysiology using a novel Na^+-Ca^{2+} exchange inhibitor, SEA0400.	$ 35,000
Travel	$1,000
TOTAL	**$36,000**

Dr. Jane Evans presents the Travel Award for Excellence in Postdoctoral Research to Yanglong Mou at the 2004 Canadian Student Health Research Forum.

TRAVEL AWARD FOR EXCELLENCE IN POSTDOCTORAL RESEARCH

Sponsorship.	Amount
Sponsorship of the **Manitoba Health Research Council Post Doctoral Research Poster Presentation Award** as part of the 2004 Canadian Student Health Research Forum. **Recipient:** Dr. Yanglong Mou, Department of Biochemistry and Medical Genetics/ Manitoba Institute of Cell Biology (Supervisor, Dr. G. Hicks) **Poster Title**: Establishment of a mouse embryonic stem cell library: An international mouse resource with over 12,000 knock-out mutations.	$ 2,500

NEW STUDENTSHIP AWARDS

Recipient (Supervisor) Department, Institution.	Amount
Bay, Denise (Dr. Deborah A. Court), Department of Microbiology, University of Manitoba. **Title:** Structural studies on mitochondrial porins.	$ 17,000
Bell, Allison (Dr. Lavern Vercaigne) Faculty of Pharmacy, University of Manitoba. **Title:** Pharmacy.	$ 17,000
Cooper, Charlton (Dr. Peter Watson), Department of Pathology, University of Manitoba. **Title:** GCP3 and Psoriasin: Is their interaction biologically significant?	$ 17,000
Douville, Renee (Dr. Kent T. HayGlass) Department of Immunology, University of Manitoba. **Title:** Respiratory virus specific immune responses in a human population.	$ 17,000
Frosk, Patrick (Dr. Klaus Wrogemann) Department of Biochemistry & Medial Genetics, University of Manitoba. **Title:** Characterization of the gene causing limb girdle muscular dystrophy type 2H.	$17,000
Friesen, Mona (Dr. Jeffery Wigle) Department of Biochemistry & Medical Genetics, St. Boniface Hospital Research Centre. **Title:** Cardiovascular development and disease.	$17,000
Grant, Jeff (Dr. Michael Mayne), Department of Pharmacology & Therapeutics, St. Boniface Hospital Research Centre. **Title:** Neuropharmacology	$ 17,000
Han, Xiaobing (Dr. Xi Yang) Department of Medical Microbiology, University of Manitoba. **Title:** Causal relationship between infection and reduced allergy.	$17,000
Hayden, Leigh (Dr. Sharon Bruce) Department of Community Health Sciences, University of Manitoba. **Title:** Quality of diabetes care in a First Nation Community in the Interlake.	$17,000

Recipient (Supervisor) Department, Institution.	Amount
Jeyaraman, Madhumathy (Dr. Elissavet Kardami) Department of Physiology, St. Boniface Hospital Research Centre. **Title:** The role and fate of Connexin-43 in cardiac injury and cardioprotection.	$ 17,000
MacPherson, Paula S. (Dr. John Walker), Department of Psychology, University of Manitoba. **Title:** Psychology	$ 17,000
Mendoza, Francisco J. (Dr. Spencer Gibson), Manitoba Institute of Cell Biology, CancerCare Manitoba. **Title:** The role of MEKK1 in Apoptosis.	$ 17,000
Nighswander-Rempel, Stephen P. (Dr. Anthony Shaw) Department of Physics & Astronomy, University of Manitoba. **Title:** Near-infrared spectroscopic imaging of myocardial ischemia.	$17,000
Ng, Carmina (Dr. Joannie Halas) Faculty of Physical Education & Recreation Studies, University of Manitoba. **Title:** The use of breath sounds to monitor exercise intensity.	$17,000
Piotrowski, Andrea S. (Dr. L. Jakobson) Department of Psychology, University of Manitoba. **Title:** Action coding systems in the brain; effects of normal aging and dementia.	$17,000
Volk, Jennifer (Dr. Judy Chipperfield) Department of Psychology, University of Manitoba. **Title:** Perceived control, health and aging.	$17,000
Wood, Linda P. (Dr. Shiva S. Halli) Department of Community Health Sciences, University of Manitoba. **Title:** The help-seeking behaviour of battered immigrant women.	$17,000
TOTAL	**$289,000**

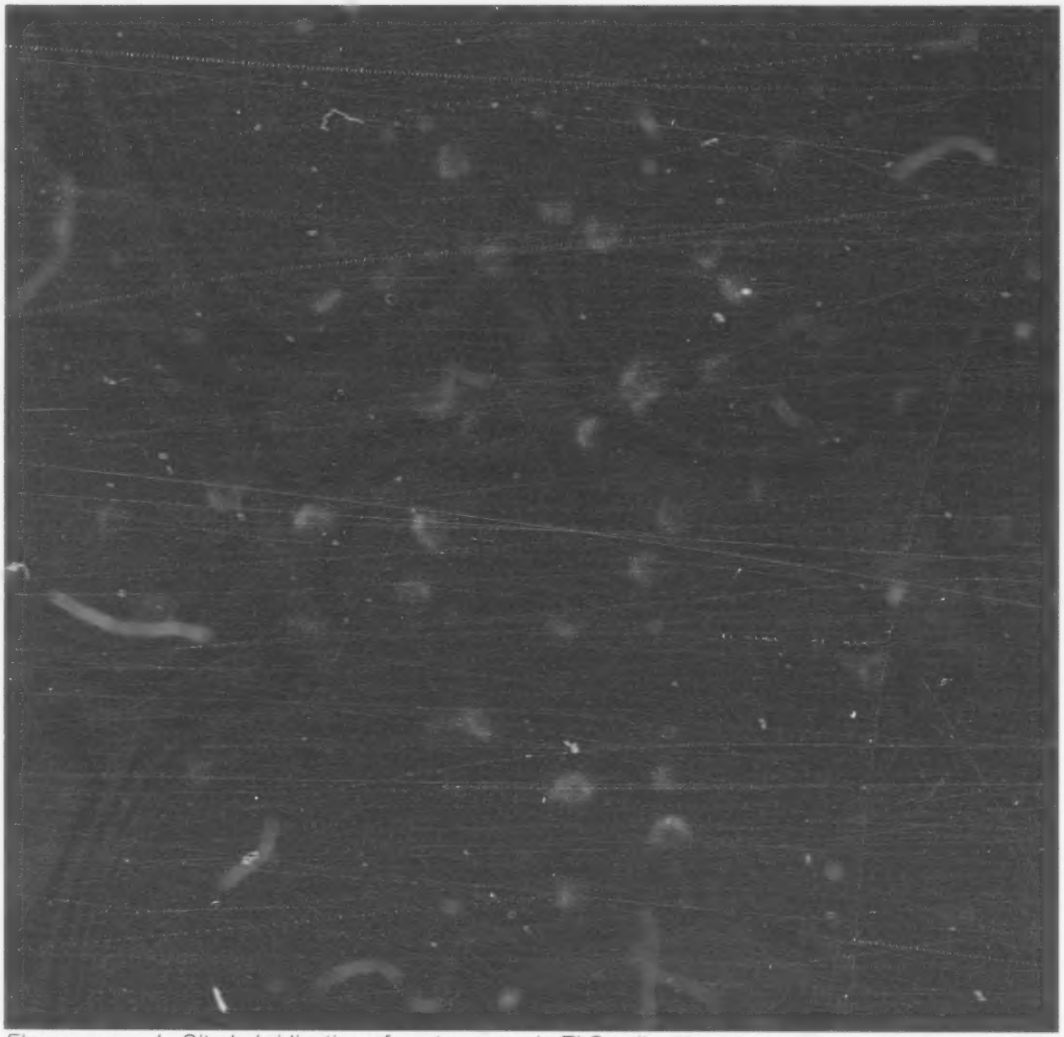
STUDENTSHIP RENEWAL AWARDS

Recipient (Supervisor) Department, Institution.	Amount
Angelovska,Tatjana (Dr. Ian Dixon) Laboratory of Molecular Cardiology, St.Boniface Hospital Research Centre. **Title:** Angiotensin II-driven kinases in the phosphorylation of Smad 2.	$17,000
Chelikani, Prashen K.V.G.B. (Dr. P.C. Loewen) Department of Microbiology, University of Manitoba. **Title:** Structure-function studies on Eschericia coli Catalase HPII.	$17,000
de Melo, Jimmy (Dr. David Eisenstat) Manitoba Institute of Cell Biology, CancerCare Manitoba. **Title:** The role of Dlx Homeobox genes in retinal development.	$17,000
Elliott, Alison M. (Dr. Jane Evans) Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Dysmorphology and Genotype-phenotype correlation in the split hand/foot syndromes.	$17,000
Elzainy, Abeer (Dr. Keith J. Simons) Faculty of Pharmacy, University of Manitoba. **Title:** Pharmaceutics.	$17,000
Fotheringham, Julie A. (Dr. Jonathan Geiger) Department of Pharmacology & Therapeutics, St. Boniface Hospital Research Centre. **Title:** Neuropharmacology	$17,000
Jensen, Victoria M. (Dr. Heinz Feldmann) Department of Medical Microbiology, University of Manitoba. **Title:** Medical Microbiology and infectious disease (virology)	$17,000
Lu, Biao (Dr. Patrick Choy) Department of Biochemistry and Medical Genetics, Faculty of Medicine, University of Manitoba. **Title:** Control of arachidonate release by phopholipase A2.	$17,000
Martin, Dianna C., (Dr. Barbara Triggs-Raine) Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Characterization of the function of Hyaluronidase 1.	$17,000

Recipient (Supervisor) Department, Institution.	Amount
Pampolina, Caroline (Dr. Archie McNicol) Department of Oral Biology, University of Manitoba. **Title:** Streptococcus sanguis-induces platelet activation.	$17,000
Sankaran, Deepa (Dr. Harold Aukema) Department of Human Nutritional Sciences, University of Manitoba **Title:** Effects of dietary n-3 fatty acids on murine polycystic kidney disease.	$17,000
Sawatsky, Bevan M. (Dr. Markus Czub) Canadian Science Centre for Human & Animal Health. **Title:** Functional characterization of Nipah virus and Hendra virus glycoproteins.	$17,000
Sidhu, Ranjinder (Dr. Rajinder Bhullar) Department of Oral Biology, University of Manitoba. **Title:** Signal transduction, role of Ral and Phospholipase C-delta 1 interaction in platelets.	$17,000
Snow, Wanda (Dr. Tammy Ivanco) Department of Psychology, University of Manitoba. **Title:** Behavioural and anatomical investigation of autism and plasticity.	$17,000
Vegh, Nicolette (Dr. Grant McClarty) Department of Medical Microbiology, University of Manitoba. **Title:** Chlamydia trachomatis.	$17,000
Zhang, Weihua (Dr. Naranjan Dhalla) Institute of Cardiovascular Sciences, St. Boniface Hospital Research Ctr. **Title:** Role of MAP Kinase in Aorta-Caval Fistula-Induced Cardiac Hypertrophy & Heart Failure in Rats.	$17,000
TOTAL	**$272,000**

Dissertation Award

Recipient (Supervisor) Department, Institution.	Amount
Bowen, Sarah J. (Dr. Joe Kaufert) Department of Community Health Sciences, University of Manitoba. **Title:** Assessing the responsiveness of health care organizations to culturally diverse groups.	$ 5,000
TOTAL	**$5,000**



Fluorescence In Situ hybridization of centromeres in TLS cells. ***This photo was graciously provided by Dr. Geoff Hicks from CancerCare Manitoba***

2003 OPERATING GRANTS REVIEW COMMITTEE

Dr. Donald Smyth, Chair
Department of Pharmacology, Faculty of Medicine
University of Manitoba

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Department of Human Nutritional Sciences, Faculty of Human Ecology
University of Manitoba

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Canadian Science Centre for Human & Animal Health

Dr. David Eisenstat
CancerCare Manitoba
Health Sciences Centre

Dr. Heinz Feldmann
Department of Medical Microbiology
Canadian Science Centre for Human & Animal Health

Dr. Spencer Gibson
Institute of Cell Biology, CancerCare Manitoba
Health Sciences Centre

Dr. Michael Jackson
Institute for Biodiagnostics
National Research Council

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University of Manitoba

Dr. Nasrin Mesaeli
Department of Biochemistry & Medical Genetics, Faculty of Medicine
St. Boniface Hospital Research Centre

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Department of Biochemistry & Medical Genetics, Faculty of Medicine
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2003 SOCIAL/POPULATION HEALTH REVIEW COMMITTEE

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University of Manitoba

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University of Manitoba

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Department of Psychiatry
PsychHealth Centre

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Dept.of Community Health Sciences, Faculty of Medicine
University of Manitoba

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University of Manitoba

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Faculty of Nursing
University of Manitoba

Dr. Michelle Porter
Faculty of Physical Education
University of Manitoba

Dr. Shiva Halli
Department of Community Health Sciences, Faculty of Medicine
University of Manitoba

Dr. Jeff Sisler
CancerCare Manitoba
Health Sciences Centre

2003 - 2004 FISCAL EXPENDITURES OVERVIEW

TOTAL EXPENDITURES

	AMOUNT	%
TOTAL	**$2,294,387**	**100.0**
Grants & Awards	**$2,137,703**	93.0
Administration	$ 156,684	7.0

ADMINISTRATION

	AMOUNT	%
TOTAL	**$156,684**	**100.0**
Salaries	$114,632	73.2
Supplies & Office Maintenance	$ 9,416	6.0
Miscellaneous	$ 32,636	20.8

GRANTS AND AWARDS

	#	AMOUNT	%
		$2,137,703	**100.0**
Establishment Grants	14	537,712	25.2
Postdoctoral Awards	4	144,000	6.7
Studentship Awards	33	561,000	26.3
Operating Grants	13	515,739	24.1
Regional Partnership Grants	6	366,752	17.2
Bridge Funding Grant	1	5,000	0.2
Sponsorship and Postdoctoral Travel Award	1	2,500	0.1
Dissertation Award	1	5,000	0.2

THE MANITOBA HEALTH RESEARCH COUNCIL

MANAGEMENT REPORT

The accompanying financial statements are the responsibility of management and have been prepared in accordance with generally accepted accounting principles. In management's opinion, the financial statements have been properly prepared and of necessity include some amounts based upon management's best estimates and judgements.

As management is responsible for the integrity of the financial statements, management has established systems of internal control to provide assurance that assets are properly accounted for and safeguarded from loss.

John C. Docherty, Ph.D.
Executive Director
June 2, 2004

BDO Dunwoody LLP
Chartered Accountants
and Advisors
www.bdo.ca

Auditors' Report

To the Legislative Assembly of Manitoba:

We have audited the statement of financial position of **Manitoba Health Research Council** as at March 31, 2004 and the statements of operations and fund balances and cash flows for the year then ended. These financial statements are the responsibility of the organization's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the organization as at March 31, 2004 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

BDO Dunwoody LLP

Chartered Accountants

Winnipeg, Manitoba
June 2, 2004

MANITOBA HEALTH RESEARCH COUNCIL
Statement of Financial Position

March 31	2004	2003
Assets		
Current Assets		
Cash and bank	$ 42,285	$ 35,255
Short-term investments		
Market Value 2004 - $901,158 (2003 - $701,801)	864,030	699,319
Accounts receivable	-	589
Accrued interest receivable	10,476	10,184
Prepaid expenses	2,157	1,401
Deposits	500	500
	919,448	747,248
Capital assets (Note 2)	4,266	5,333
	$ 923,714	$ 752,581
Liabilities and Fund Balances		
Current Liabilities		
Accounts payable and accrued liabilities	$ 10,396	$ 7,946
Research grants payable	142,980	192,835
	153,376	200,781
Commitments (Note 5)		
Fund Balances		
General Research Fund	788,839	140,349
Regional Partnerships Program Fund	(18,501)	7,513
Strategic Health Research Development Fund	-	403,938
	770,338	551,800
	$ 923,714	$ 752,581

Approved on behalf of the Board:

_____ Director

_____ Director

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements.

MANITOBA HEALTH RESEARCH COUNCIL
Statement of Operations and Fund Balances

For the year ended March 31	General Research Fund	Regional Partnership Fund	Strategic Health Research Development Fund	2004 Total	2003 Total
Revenue					
Province of Manitoba grants	$ 1,952,600	$ 360,822	$ -	$ 2,313,422	$ 1,934,433
Grants returned / rescinded	147,121	1,619	-	148,740	25,484
Investment income	48,963	1,800	-	50,763	65,960
	2,148,684	364,241	-	2,512,925	2,025,877
Expenditures					
Administration	133,181	23,503	-	156,684	147,886
Personnel awards	712,500	77,000	-	789,500	755,000
Research grants	1,058,451	289,752	-	1,348,203	1,199,367
	1,904,132	390,255	-	2,294,387	2,102,253
Excess (deficiency) of revenue over expenditures	244,552	(26,014)	-	218,538	(76,376)
Fund balances, beginning of year	140,349	7,513	403,938	551,800	628,176
Transfer Strategic Health Research Development Fund to General Research Fund (Note 4)	403,938	-	(403,938)	-	-
Fund Balances, end of year	$ 788,839	$ (18,501)	$ -	$ 770,338	$ 551,800

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements.

MANITOBA HEALTH RESEARCH COUNCIL
Statement of Cash Flows

For the year ended March 31	2004	2003
Cash Flows from Operating Activities		
Excess (deficiency) of revenue over expenditures for the year	$ 218,538	$ (76,376)
Adjustments for		
Amortization of capital assets	1,067	890
	219,605	(75,486)
Changes in non-cash working capital balances		
Short-term investments	(164,711)	577,250
Accounts receivable	589	(589)
Accrued interest receivable	(292)	47,465
Prepaid expenses	(756)	157
Accounts payable and accrued liabilities	2,450	787
Research grants payable	(49,855)	(529,080)
	7,030	20,504
Cash Flows from Investing Activities		
Purchase of capital assets	-	(2,127)
Increase in cash and cash equivalents during the year	7,030	18,377
Cash, beginning of year	35,255	16,878
Cash, end of year	$ 42,285	$ 35,255
Supplementary Information:		
Interest received	$ 41,844	$ 89,377

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements.

MANITOBA HEALTH RESEARCH COUNCIL
Summary of Significant Accounting Policies

March 31, 2004

Financial Instruments

The organization's financial instruments consist of cash, accounts receivable, short-term investments, and accounts payable. Unless otherwise noted, it is management's opinion that the organization is not exposed to significant interest, currency or credit risks arising from these financial instruments. The fair values of these financial instruments approximate their carrying values, unless otherwise noted.

Short-Term Investments

Short-term investments are stated at the lower of cost and market value.

Capital Assets

Capital assets are stated at cost less accumulated amortization. Amortization, based on the estimated useful life of the asset, is calculated as follows:

Office equipment	20% diminishing balance basis
Computer equipment	20% diminishing balance basis

Fund Accounting

The Manitoba Health Research Council follows the restricted fund method of accounting for contributions.

The General Research Fund reports only restricted resources that are used for research purposes. General research grants are charged to expenditures in the year the funding is committed for, by Council. Research grants returned to or rescinded by the Council are recorded as revenues when received or rescinded.

Regional Partnership awards are charged to expenditures when funding is received from the Province of Manitoba. Regional partnership awards returned to or rescinded by the Council are recorded as revenues when received or rescinded.

Interest Revenue

Interest revenue is allocated proportionately to the Funds on the basis of monthly Fund balances.

Personnel Awards

Personnel awards and their renewals are charged to expenditures when funding is approved by Council.

Administrative Expenditures

Administration expenses are allocated 85% to the Research Fund, 15% to the Regional Partnership Fund.

1. Entity Definition

The Manitoba Health Research Council was established by The Manitoba Health Research Council Act to promote and assist basic, clinical and applied research in the health sciences in Manitoba. The Manitoba Health Research Council is a registered charity and is exempt from tax under the Income Tax Act.

2. Capital Assets

	2004		2003	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
Office equipment	$ 6,375	$ 4,495	$ 6,375	$ 4,025
Computer equipment	4,642	2,256	4,642	1,659
	$ 11,017	$ 6,751	$ 11,017	$ 5,684
Cost less accumulated amortization		$ 4,266		$ 5,333

3. Related Party Transactions

Manitoba Health Research Council is related to all Province of Manitoba departments and agencies. During the year, the Council had the following transactions with related organizations:

Grant Revenue	$ 2,313,422
Office Rent at no charge - University of Manitoba	

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

4. Closing the Strategic Health Research Development Fund

In September the Department of Energy, Science & Technology permitted the Manitoba Health Research Council to close the Strategic Health Research Development Fund and transfer any funds remaining in the account to the General Research Fund to be used in accordance with the guidelines of that fund.

March 31, 2004

5. Commitments

The Manitoba Health Research Council has committed grants and awards under the General Research Fund and the Regional Partnership Fund as follows:

Year	General Research Fund	Regional Partnership Fund	Total
2004	$ 958,041	$ 77,000	$ 1,035,041
2005	1,212,598	-	1,212,598
2006	148,299	-	148,299
	$ 2,318,938	$ 77,000	$ 2,395,938

Commitments of future years of the General Research Fund and Regional Partnership Fund are not recorded as an expenditure in the year of commitment, they are recorded as paid.

These commitments are funded as follows:

Current General Research Fund Balance	**$ 788,839**
Current Regional Partnership Fund Balance	**(18,501)**
Future Province of Manitoba grants	**1,625,600**
	$ 2,395,938

6. Economic Dependence

The Manitoba Health Research Council relies almost entirely on grants from the Province of Manitoba.

MANITOBA HEALTH RESEARCH COUNCIL
Schedule of Administrative Expenses

For the year ended March 31	2004	2003
Accounting and audit	$ 3,490	$ 3,200
Amortization	1,067	890
Bank charges and interest	150	160
Council and committee expenses	20,536	4,922
Delivery	3,704	1,757
GST expense	985	791
Insurance	3,477	4,017
Printing, stationery and office supplies	6,544	8,341
Repairs and maintenance	1,090	1,075
Salaries and benefits	114,632	121,440
Telephone	1,009	1,293
	$ 156,684	$ 147,886